California Energy Commission STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 8 for a Selected Project With a Location Change Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-11-602 - Alternative Fuels Infrastructure: Electric, Natural Gas, Propane, E85, and Diesel Substitutes Terminals



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ADDENDUM 8

The Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-11-602, Advanced Vehicle Technology Manufacturing was posted April 27, 2012. This addendum applies the same localized health impacts assessment method. Whole Energy Pacifica LLC, has proposed a new site location for the "Inline Biodiesel Blending Terminal" shown in Table 1.

Table 1: Proposed Site Change for a Biodiesel Blending Terminal

Original Site Location	Environmental Justice (EJ) Indicators for the Original Location	New Site Location	EJ Indicators for New Location
810 Wright Avenue,	Poverty (1)	860 West Beach	Poverty (1)
Richmond, California	Minority (2)	Street, Watsonville,	Minority (2)
94804	Unemployment (3)	California 95076	Unemployment (3)
			Age (4)

Source: Energy Commission staff analysis

The Richmond site location has three EJ indicators,² and the Watsonville site has four, as shown in Table 1. Both locations have nonattainment status for ozone, particulate matter³ (PM) 2.5, and PM 10. With more than two EJ indicators, the Richmond and Watsonville sites are both in high-risk communities.

The Watsonville site will increase the accessibility of blended biodiesel by 1 million gallons per year. The proposer's best practices include turning trucks off during loading and unloading. The bulk of the localized health impacts will occur when the trucks drive 48 miles between the San Jose diesel terminal to the Whole Energy Fuels Biodiesel Blending Terminal in Watsonville. Table 2 shows the emissions. Considering the truck transport of the biodiesel, the net impacts show no major negative health impacts from the project.

¹ Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004.

² The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.9 percent (2009-2013), (iii.) city's unemployment rate exceeds California's unemployment rate of 7.0 percent as of December 2014, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than then California's average. Note: For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

^{3 &}quot;Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled, and a chief component of exhaust emissions from heavy-duty diesel engines.

Table 2: Criteria Pollutant Emissions From Delivery Based on 48-Mile Truck Delivery (one-way) and 141,570,000 Kilograms (weight of diesel per year)

Pollutant	Kilograms of Emissions (per year)				
Carbon Dioxide (CO ₂ , fossil)	103,0000,000				
Methane (CH ₄)	360,000				
Nitrous Oxide (N2O)	101,000				
Carbon Monoxide (CO)	3,360,000				
Hydrocarbons (except methane)	720,000				
Hydrocarbons (unspecified)	408,000				
Particulates (PM ₁₀)	115,000				
Particulates (unspecified)	218,000				
Sulfur Oxides (SO _x as SO ₂)	151,000				
Nitrogen Oxides (NO _x as NO ₂)	9,600,000				

Source: Energy Commission staff analysis

APPENDIX A

Table A-1: Demographics and Environmental Justice (EJ) Indicators Compared With the State of California (Yellow highlighted areas indicate numbers that meet the definition for EJ Indicators.)

	Persons	Black	American	Persons of	Asian	Persons	Persons	Un-employ-
	Below Poverty	Persons (2010)	Indian and Alaska	Hispanic or Latino	(2010)	Under 5 Years of	Over 65 Years of	ment Rate (December
	Level (2009-	()	Native (2010)	Origin (2010)		Age (2010)	Age (2010)	2014)
California	2013)	6.20/	1.00/	27 60/	12.00/	6.00/	11 40/	7.00/
California	15.9 %	6.2%	1.0%	37.6%	13.0%	6.8%	11.4%	7.0%
California		>30.0%	>30.0%	>30.0%	>30.0%			
(minorities)								
Watsonville	<mark>20.7%</mark>	0.7%	1.2%	<mark>81.4%</mark>	3.3%	<mark>9.5%</mark>	8.3%	<mark>17.8%</mark>

Sources: Unemployment information from the State of California, Employee Development Department (EDD) Labor Market Information Division: http://www.labormarketinfo.edd.ca.gov/CES/Labor_Force_Unemployment_Data_for_Cities_and_Census_Areas.html and Demographics information from the U.S. Department of Commerce, U.S. Census Bureau: http://quickfacts.census.gov/qfd/states/06/0683668.html